Applicant: Jun Koyama et al. Attorney's Docket No.: 12732-071001 / US5156

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## REMARKS

Claims 1-62 are pending, of which claims 1-53 and 62 have been examined, while claims 54-61 are withdrawn. Of the examined claims 1-53 and 62, claims 1, 12, 23, 36, 50, 54, 58, and 62 are independent. By virtue of this response, independent claims 1 and 12 are amended only for reasons of clarity. No new matter has been added.

Claims 23-53 are allowed. Applicant thanks the Examiner for allowing these claims.

Claims 23-35 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting, as being unpatentable over claims 21-32 of co-pending U.S. Application No. 09/931,061 (the '061 application). Claims 36-49 also are provisionally rejected under the judicially created doctrine of obviousness-type double patenting, as being unpatentable over claims 33-45 of the '061 application.

Applicant understands that these rejections will be maintained until overcome or until a terminal disclaimer is filed. Applicant intends to evaluate the rejections upon allowance and issue of the '061 application, and/or upon withdrawal of the below-listed rejections based on 35 U.S.C. 103(a). Applicant thanks the Examiner for withdrawing the double-patenting rejection of claims 1-22 of the present application.

Claims 1, 4, 9-12, 15, 20-22 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,246,386 to Perner (Perner) in view of U.S. Patent No. 4,432,610 to Kobayashi (Kobayashi) and further in view of U.S. Patent No. 5,945,972 to Okumura et al. (Okumura). Claims 2, 5, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perner, Kobayashi, and Okumura, as applied to claims 1 and 12 above, and further in view of Yamazaki et al. (US Patent 5,699,078). Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perner and Kobayashi and Okumura as applied to claims 1 and 12 above, and further in view of Yamazaki et al. (US Patent 5,349,366).

Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perner and Kobayashi and Okumura as applied to claims 1 and 12 above, and further in view of Parks (US Patent 5,471,225). Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perner and Kobayashi and Okumura as modified by Parks as applied to claims

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1/12 and 6/17 above, and further in view of Fonash et al. (US Patent 5,945,866). Claims 8 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perner and Kobayashi and Okumura as modified by Parks as applied to claims 1/12 and 6/17 above, and further in view of Johnson (US Patent 4,752,118).

Regarding the rejection of claims 1, 4, 9-12, 15, 20-22 and 62 under 35 U.S.C. 103(a) as being unpatentable over Perner in view of Kobayashi and further in view of Okumura, Applicant respectfully submits that this rejection fails to establish a prima facie case of obviousness. In particular, the rejection lacks proper motivation to combine, inasmuch as it relies on an incorrect reading of Okumura, as discussed in more detail, below.

For example, in combining Perner and Kobayashi with Okumura, the Office Action states in Paragraph 4 that, with emphasis added, "Okumura teaches incorporating a memory circuit ... with each pixel in a display panel ... that facilitates independent writing and reading of image data ...(t)herefore, it would have been obvious ... to incorporate Perner's dynamic (volatile) memories into Okumura's first memory and Kobayashi's non-volatile memories into Okumura's second memory because of Okumura's advantage in allowing **independent** write and read operations."

However, Applicant respectfully submits that this rejection represents an incorrect reading of Okumura, because, in fact, that references does not disclose or properly suggest "independent write and read operations," as asserted in the Office Action. For example, as shown in FIGS. 8 and 9 of Okumura, the on/off action of the TFT 232a/233a is not independent from the on/off action of the TFT 232b/233b.

For instance, in FIG. 8, when the signal line 275 is connected to the first memory 230a, then the signal line 275 is necessarily dis-connected from the second memory 230b. Conversely, the liquid crystal cell (referred to as CEL) 276 is necessarily connected to the second memory 230b and dis-connected from the first memory 230a. Similar comments apply to first memory 230a' and second memory 230b' of FIG. 9.

As a result, Applicant submits that Okumura does not disclose the alleged "independent read and write operations." Therefore, and without necessarily agreeing that other elements of

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the rejection are correct, Applicant submits that the given motivation or advantage for the proposed combination of Perner, Kobayashi, and Okumura is not taught by Okumura, so that the rejection is invalid for at least these reasons.

Based on the above, Applicant submits that independent claims 1, 12, and 62, along with their dependent claims 2-11 and 13-22, are allowable for at least the above reasons. Since claims 23-53 have already been indicated to be allowable, Applicant respectfully submits that the present application is in condition for allowance, except to the extent indicated with respect to the double-patenting rejection of claims 23-49, above.

Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Reg. No. 46,112

Date: February 4, 2005

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